



State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES  
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(603) 271-3644 FAX (603) 271-2181



March 31, 2003

Mr. Douglas Nelson, PE  
White Knight Treatment Systems  
281 County Rte 51A  
Oswego, NY 13126

Re: White Knight Wastewater Treatment Device

Dear Mr. Nelson:

The NH Department of Environmental Services (department) has reviewed the material you submitted requesting approval of the White Knight wastewater treatment device.

To summarize, the White Knight is a device that is inserted into a septic tank. Air is bubbled into the device, which also contains an inoculant of a proprietary mixture of bacteria chosen to degrade the contaminants in ordinary wastewater very quickly. The air bubbling process leads to circulation of dissolved oxygen and the proprietary bacteria throughout the septic tank and into the leaching facility downstream of the tank. The intent is to get the oxygen and bacteria into the leaching facility so that failed leaching facilities can be remediated.


Based on information received, the department finds that the White Knight wastewater treatment device can be used in New Hampshire as part of a repair of a failed system. The department's approval of the White Knight wastewater treatment device is, at this time, limited to this case-by-case repair scenario. The conditions of this approval are:

1. Units must be installed in accordance with the manufacturer's recommendations.
2. All other details of the overall wastewater disposal system using White Knight devices must comply with the provisions of NH Code of Administrative Rules, Chapter Env-Ws 1000. In this case, the parts of that rule that apply to repair of failed systems apply in full. We especially note the importance of digging a test pit to confirm that a failed leach field is sufficiently above the seasonal high water table.
3. As is the case with all mechanical treatment units approved for residential use in New Hampshire, maintenance must be performed by a licensed wastewater treatment plant operator. A fact sheet on DES's licensure program is available at <http://www.des.state.nh.us/factsheets/wwt/web-2.htm>. For small residential applications, a Grade 1 license will be sufficient.
4. A renewable maintenance contract must be sold with each White Knight unit.

5. Per Env-Ws 1024.06(c), a copy of this letter shall accompany any specific design involving the use of the White Knight treatment device under this approval which may be submitted to DES.

I hope this letter meets your needs. If you have questions, please contact me at 603-271-2941 or email at [rminicucci@des.state.nh.us](mailto:rminicucci@des.state.nh.us), or contact Mr. William Evans, PE, Administrator of the Subsurface Systems Bureau at 603-271-3304.

Sincerely,



Robert P. Minicucci II, PE  
Innovative Technology Coordinator

WhiteKnight 3-03

CC: William Evans, PE, DES/SSB  
James Falicon, DES/SSB  
Rob Tardif, PE, DES/SSB  
Jav Baas, DES/SSB